PCV100

METFORMIN FOR THE TREATMENT OF METABOLIC DISTURBANCES AND CARDIOVASCULAR RISK FACTORS IN WOMEN WITH POLYCYSTIC OVARY SYNDROME: A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: Polycystic Ovary Syndrome (PCOS) is one of the most common endocrine disorders affecting five to ten percent of young women. Aside from its cutaneous symptoms and reproductive morbidity, PCOS associates with metabolic syndrome and an increased risk of cardiovascular events. In recent years the use of Metformin, an insulin sensitizer, in PCOS has aroused a great interest. Metformin administration restores ovulatory menstrual cycles and seems to improve infertility. However, the extent to which this agent improves the metabolic and cardiovascular risk factors associated with PCOS remains uncertain. Our aim was to assess the effectiveness of Metformin in improving clinical and metabolic features of PCOS. **METHODS:** Systematic Review (up to February 2008) and meta-analysis of randomized controlled trials that compared Metformin versus placebo or other standard therapies for PCOS such as oral contraceptive pills (OCPs) and measured metabolic and cardiovascular parameters. Studies were critically appraised. Pooled estimates of effect were based on a random-effects model. Odds Ratio and Weighted Mean Difference, with 95% confidence interval, used were appropriate. Consistency across studies was evaluated by means of the I-square statistic. Potential reasons for heterogeneity were explored. **RESULTS:** Of 120 candidate studies, 19 trials were eligible. Methodological quality of these trials was low. Meta-analyses showed a small decrease in BMI and systolic blood pressure in women treated with Metformin compared to placebo. The other parameters including waist circumference, waist-hip ratio, diastolic blood pressure, fasting blood glucose, insulin levels and lipid profile did not differ between the groups. As against OCPs, Metformin significantly reduced the BMI but no other significant differences were observed. **CONCLUSIONS:** Scant and inconsistent evidence suggest that Metformin provide limited or no important benefit for metabolic derangements and cardiovascular risk factors in women with PCOS. Further research is needed to solve this important health issue.

PCV101

PROSPECTIVE STUDY TO EVALUATE THE IMPACT OF A DISEASE EDUCATION PROGRAM OF CARDIOVASCULAR RISK CONTROL IN HYPERTENSION

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OBJECTIVES: To evaluate the effectivity of an education program, measuring the percentage of patients with blood pressure control at the end of a follow-up period in comparison to baseline. **METHODS:** Prospective and multicentric study realized in Hypertension Units (HU) and Primary Care (PC) centers in Spain. Physicians included outpatients ≥18 years with not controlled essential hypertension (BP > 140/90 or BP > 130/80 mmHg if diabetic or previous CV events and BP < 180/110 mmHg). Patients were followed for five months in four scheduled visits. At V0 blood pressure, patient demographics, medical and drug history, CV risk factors and lifestyle were assessed using standardized methods. Between V0 and V1 the intervention consists in medical education for physicians on CV risk control and guidelines. During V1 and V2 patients received education and support. At V3 we assessed the overall intervention in BP control. Informed consent was obtained. **RESULTS:** A total of 316 patients were recruited, 64.2% in PC and 35.8% in HU centers (62.8 ± 12.1 years, 51.6% males, BMI 29.8 ± 5.1 Kg/m^2). Mean office BP was 156.0 ± 14.3/89.4 ± 10.9 (mean AMPB daytime 141.4 ± 12.7/86.5 ± 11.3) mmHg at baseline. Obesity (60.6%), dyslipemia (53.4%), type-2 diabetes (23.1%), target organ damage (16.6%), smoking habits (16.6%) and coronary artery disease (12.8%) were the most prevalent CV risk factors. A total of 82.4% of patients completed satisfactorily the intervention. Mean BP had a decreasing trend along the study: at V1 mean BP was 143.1 ± 16.9/82.8 ± 11.5, at V2 was 137 ± 13.1/79,5 ± 9.1 and at V3 was 135.0 ± 12.4/77,8 ± 8.8. At the end of the study 52.7% of patients reach the BP goal during the 5–month intervention study. **CONCLUSIONS:** Based on this results, medical and patient education determine a greater BP control, hence more educational actions are needed to increase BP control.

PCV102

COST-EFFECTIVENESS OF MANAGING ORAL ANTICOUAGULATION (OAC) AFTER CATHETER ABLATION FOR ATRIAL FIBRILLATION (PAAF) WITH IMPLANTABLE CARDIAC MONITORS (ICMS)

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OBJECTIVES: PAAF is becoming an increasingly common therapeutic procedure for symptomatic AF. Until recently, oral anticoagulation regimens remained in place even after a successful ablative procedure. Recent clinical debate, however, suggests that oral anticoagulation could be discontinued after an ablation, should the patient be free from AF. ICMs can be used immediately after the ablation procedure to verify freedom from asymptomatic AF recurrence. If the patient remains free from symptomatic and asymptomatic AF recurrences, OAC may be discontinued. The ICM will also alert the patient of any recurrences after OAC has been stopped. In this way, OAC can be restarted if needed. We sought to examine the cost-effectiveness of this OAC management strategy. **METHODS:** We developed a Markov Decision Analytic Model in TreeAge Pro Version 8 for Health care. Literature searches were performed for risk of AF recurrence; risk of stroke; risk of OAC adverse effects; and, risks of anti-arrhythmic adverse effects. Utilities for the various health states were also found in the literature. Costs were based of the UK NHS. **RESULTS:** Using ICM to manage oral anticoagulation proved cost-effective within the three-year lifespan of the device. The ICER was estimated at £27,582 per QALY gained. **CONCLUSIONS:** Managing oral anticoagulation in this patient population is a newly developed concept. This strategy has the potential to allow individuals restricted in their daily activities by OAC treatment to resume their normal lives. Our analysis has shown that OAC management can be cost-effective. Further work is needed to assess the cost-effectiveness implications over a longer timeframe and to identify the patient subgroups where the economic benefits of OAC management are maximized.

PCV103

TECHNOLOGICAL INNOVATION AND THE DECISION-MAKING PROCESS IN ITALIAN HOSPITALS

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OBJECTIVES: This paper aims at discussing hospital managers' consideration of costs vs. tariffs (i.e. DRGs) when decisions on